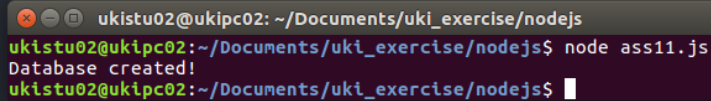


1)

```
1 var MongoClient = require('mongodb').MongoClient;
2 var url = "mongodb://localhost:27017/students";
3
4 MongoClient.connect(url, function(err, db) {
5   if (err) throw err;
6   console.log("Database created!");
7   db.close();
8 });
9
```



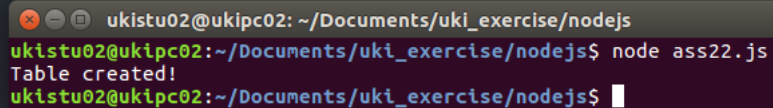
A terminal window titled "ukistu02@ukipc02: ~/Documents/uki_exercise/nodejs" showing the command "node ass11.js" being executed. The output is "Database created!".

```
ukistu02@ukipc02: ~/Documents/uki_exercise/nodejs
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$ node ass11.js
Database created!
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$
```

2)

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/students";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  db.createCollection("studentmarks", function(err, res) {
    if (err) throw err;
    console.log("Table created!");
    db.close();
  });
});
```



A terminal window titled "ukistu02@ukipc02: ~/Documents/uki_exercise/nodejs" showing the command "node ass22.js" being executed. The output is "Table created!".

```
ukistu02@ukipc02: ~/Documents/uki_exercise/nodejs
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$ node ass22.js
Table created!
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$
```

3)

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/students";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var myobj = [
    { name: 'Mala', maths_marks:45 , english_marks:53,science_marks:72},
    { name: 'Vanu', maths_marks:80 , english_marks:75,science_marks:85},
    { name: 'Kala', maths_marks:32 , english_marks:46,science_marks:53},
    { name: 'Aruli', maths_marks:78 , english_marks:85,science_marks:80},
    { name: 'Shayu', maths_marks:80 , english_marks:76,science_marks:65},
    { name: 'Kumaran', maths_marks:32 , english_marks:73,science_marks:84},
    { name: 'Lucky', maths_marks:66 , english_marks:90,science_marks:45},
    { name: 'Gva', maths_marks:71 , english_marks:75,science_marks:56},
    { name: 'Ram', maths_marks:41 , english_marks:65,science_marks:88}
  ];
  db.collection("studentmarks").insert(myobj, function(err, res) {
    if (err) throw err;
    console.log("Number of records inserted: " + res.insertedCount);
    db.close();
  });
});
```

```
ukistu02@ukipc02: ~/Documents/uki_exercise/nodejs
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$ node ass33.js
Number of records inserted: 9
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$
```

4)

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/students";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var myquery = { name:'Mala'};
  var newvalues = {$set: {maths_marks:51}};
  db.collection("studentmarks").update(myquery, newvalues, function(err, res) {
    if (err) throw err;
    console.log(res.result.nModified + " record updated");
    db.close();
  });
});
```

```
ukistu02@ukipc02: ~/Documents/uki_exercise/nodejs
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$ node ass55.js
1 record updated
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$
```

```
1 record updated
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$ node ass44.js
[ { _id: 5937ba1932720f13a9a6a9bc,
  name: 'Mala',
  maths_marks: 51,
  english_marks: 53,
  science_marks: 72 },
  { _id: 5937ba1932720f13a9a6a9bd,
  name: 'Vanu',
  maths_marks: 80,
  english_marks: 75,
  science_marks: 85 },
  { _id: 5937ba1932720f13a9a6a9be,
  name: 'Kala',
  maths_marks: 32,
  english_marks: 46,
  science_marks: 53 },
  { _id: 5937ba1932720f13a9a6a9bf,
  name: 'Aruli',
  maths_marks: 78,
  english_marks: 85,
  science_marks: 80 },
  { _id: 5937ba1932720f13a9a6a9c0,
  name: 'Shayu',
  maths_marks: 80,
  english_marks: 76,
  science_marks: 65 }
```

5)

```
var http = require('http');
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/students";

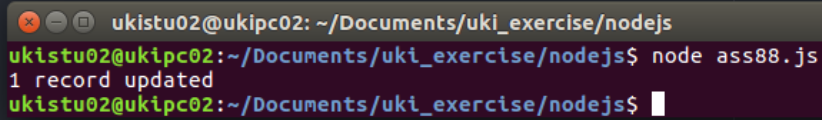
MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var query = { maths_marks:{$gt:50}};
  db.collection("studentmarks").find(query).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```

```
at handleCallback (/home/ukistu02/Documents/uki_exercise/nodejs/node_modules/mongodb-core/lib/cursor.js:102:11)
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$ node ass66.js
[ { _id: 5937ba1932720f13a9a6a9bc,
  name: 'Mala',
  maths_marks: 51,
  english_marks: 53,
  science_marks: 72 },
  { _id: 5937ba1932720f13a9a6a9bd,
  name: 'Vanu',
  maths_marks: 80,
  english_marks: 75,
  science_marks: 85 },
  { _id: 5937ba1932720f13a9a6a9bf,
  name: 'Aruli',
  maths_marks: 78,
  english_marks: 85,
  science_marks: 80 },
  { _id: 5937ba1932720f13a9a6a9c0,
  name: 'Shayu',
  maths_marks: 80,
  english_marks: 76,
  science_marks: 65 },
  { _id: 5937ba1932720f13a9a6a9c2,
  name: 'Lucky',
  maths_marks: 66,
  english_marks: 90,
  science_marks: 45 },
  { _id: 5937ba1932720f13a9a6a9c3,
  name: 'Gva',
  maths_marks: 71,
  english_marks: 75,
  science_marks: 56 } ]
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$
```

7)

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/students";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var myquery = { name:'Lucky'};
  var newvalues = {$set: {science_marks:75}};
  db.collection("studentmarks").update(myquery, newvalues, function(err, res) {
    if (err) throw err;
    console.log(res.result.nModified + " record updated");
    db.close();
  });
});
```



A terminal window titled 'ukistu02@ukipc02: ~/Documents/uki_exercise/nodejs' showing the execution of 'node ass88.js'. The output is '1 record updated'.

```
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$ node ass88.js
1 record updated
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$
```

8)

```
var http = require('http');
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/students";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var query = { maths_marks:{$gt:50},english_marks:{$gt:50},science_marks:{$gt:50}};
  db.collection("studentmarks").find(query).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```

```

    at startup (bootstrap_node.js:150:9)
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$ node ass99.js
[ { _id: 5937ba1932720f13a9a6a9bc,
  name: 'Mala',
  maths_marks: 51,
  english_marks: 53,
  science_marks: 72 },
  { _id: 5937ba1932720f13a9a6a9bd,
  name: 'Vanu',
  maths_marks: 80,
  english_marks: 75,
  science_marks: 85 },
  { _id: 5937ba1932720f13a9a6a9bf,
  name: 'Aruli',
  maths_marks: 78,
  english_marks: 85,
  science_marks: 80 },
  { _id: 5937ba1932720f13a9a6a9c0,
  name: 'Shayu',
  maths_marks: 80,
  english_marks: 76,
  science_marks: 65 },
  { _id: 5937ba1932720f13a9a6a9c2,
  name: 'Lucky',
  maths_marks: 66,
  english_marks: 90,
  science_marks: 75 },
  { _id: 5937ba1932720f13a9a6a9c3,
  name: 'Gva',
  maths_marks: 71,
  english_marks: 75,
  science_marks: 56 } ]

```

9)

```

var http = require('http');
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/students";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var query = { maths_marks:{$lt:50},english_marks:{$gt:50}};
  db.collection("studentmarks").find(query).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});

```

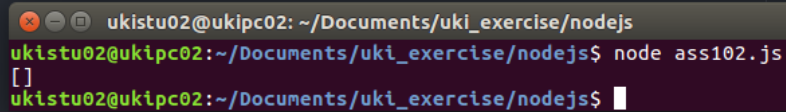
```

science_marks: 50 } ]
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$ node ass101.js
[ { _id: 5937ba1932720f13a9a6a9c1,
  name: 'Kumaran',
  maths_marks: 32,
  english_marks: 73,
  science_marks: 84 },
  { _id: 5937ba1932720f13a9a6a9c4,
  name: 'Ram',
  maths_marks: 41,
  english_marks: 65,
  science_marks: 88 } ]
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$

```

10)

```
1 var http = require('http');
2 var MongoClient = require('mongodb').MongoClient;
3 var url = "mongodb://localhost:27017/students";
4
5 MongoClient.connect(url, function(err, db) {
6   if (err) throw err;
7   var query = { maths_marks:{$lt:40},science_marks:{$lt:40}};
8   db.collection("studentmarks").find(query).toArray(function(err, result) {
9     if (err) throw err;
10    console.log(result);
11    db.close();
12  });
13 });
14
```



A terminal window titled 'ukistu02@ukipc02: ~/Documents/uki_exercise/nodejs' showing the command 'node ass102.js' being executed. The output is an empty array '[]'.

```
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$ node ass102.js
[]
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$
```

11)

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/students";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var myquery = { name:'Ram'};
  var newvalues = {$unset: {science_marks:""} };
  db.collection("studentmarks").update(myquery, newvalues, function(err, res) {
    if (err) throw err;
    console.log(res.result.nModified + " record updated");
    db.close();
  });
});
```

```
ukistu02@ukipc02: ~/Documents/uki_exercise/nodejs$ node ass103.js
1 record updated
```

```
{ _id: 5937ba1932720f13a9a6a9c2,
  name: 'Lucky',
  maths_marks: 66,
  english_marks: 90,
  science_marks: 75 },
{ _id: 5937ba1932720f13a9a6a9c3,
  name: 'Gva',
  maths_marks: 71,
  english_marks: 75,
  science_marks: 56 },
{ _id: 5937ba1932720f13a9a6a9c4,
  name: 'Ran',
  maths_marks: 41,
  english_marks: 65 },
{ _id: 5937cdcd776f65193f2693f6, Average: '' } ]
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$
```

12)

```
2
3
4 var MongoClient = require('mongodb').MongoClient;
5 var url = "mongodb://localhost:27017/students";
6
7 MongoClient.connect(url, function(err, db) {
8   if (err) throw err;
9   var myobj = { name: "John", maths_marks: 87, english_marks: 23 };
10  db.collection("studentmarks").insertOne(myobj, function(err, res) {
11    if (err) throw err;
12    console.log("1 record inserted");
13    db.close();
14  });
15 });
16
```



```
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$ node ass104.js
1 record inserted
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$ node ass44.js
```

```
    science_marks: 56 },
  { _id: 5937ba1932720f13a9a6a9c4,
    name: 'Ram',
    maths_marks: 41,
    english_marks: 65 },
  { _id: 5937cdcd776f65193f2693f6, Average: '' },
  { _id: 5937e228ef9d9a22d8f53dd6,
    name: 'John',
    maths_marks: 87,
    english_marks: 23 } ]
ukistu02@ukipc02:~/Documents/uki_exercise/nodejs$
```